






HOLLOW GLASS SPHERES

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(58) Field of search by ISA
US 501/33,39,57,58,59,63,66,67,68,69,70,72.

(54) **Hollow glass spheres**

(57) Hollow glass spheres having average densities of approximately 10 grams/cc to approximately 2.0 grams/cc are prepared by heating solid glass particles. The glass spheres consist essentially of the following ingredients in the following amounts stated as weight percentages: SiO₂(50 to 57 %); R₂O(2 to 15 %); B₂O₃(0 to 20 %); S(.05 to 1.5 %); RO(2 to 25%); RO₂ (other than SiO₂) (0 to 5 %); R₂O₃ (other than B₂O₃) (0 to 10 %); R₂O₅(0 to 5 %); and F(0 to 5 %). R represents a metal or an element like phosphorous which combines with oxygen in glass. The sizes of the hollow glass spheres are selected to produce a maximum average strength for a desired average density.